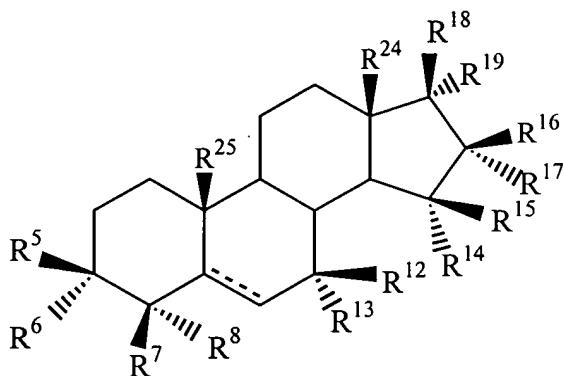


AMENDMENTS TO THE CLAIMS

This listing of claims replaces any prior version of the claims in the application.

5 Claims 1-32 (cancelled).

33 (withdrawn): A pharmaceutical composition comprising at least one compound of the following structure



10 wherein R⁵ and R⁶ are each independently selected from the group consisting of OC(O)OCH₃, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, provided that at least one of R⁷ and R⁸

15 are OC(O)OCH₃;

20 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether,

an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one each of R¹² and R¹³ or R¹⁸ and R¹⁹ can independently be H;

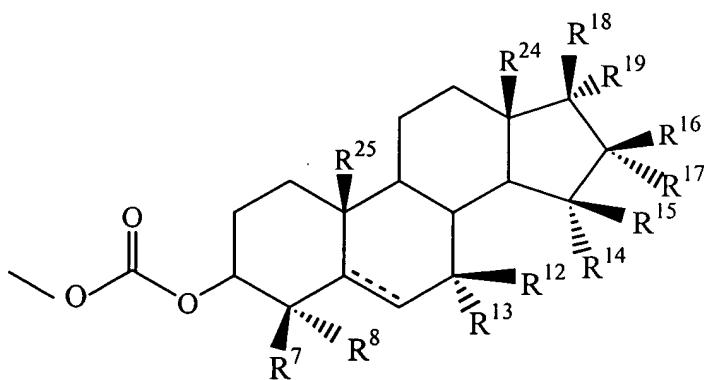
wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration;

and a pharmaceutically acceptable excipient.

34 (withdrawn): The pharmaceutical composition of claim 33, wherein said at least one compound has the following structure



20 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally

substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a

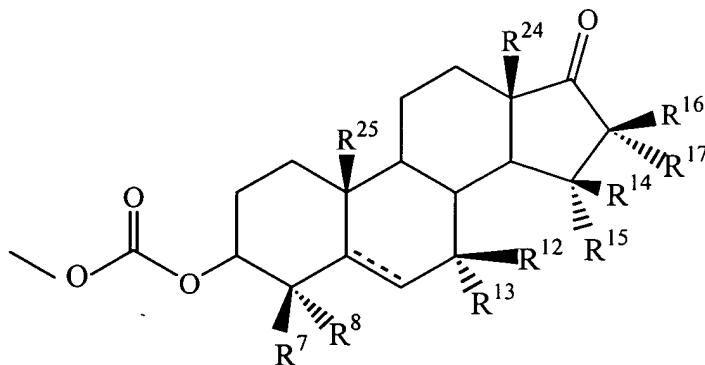
5 nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one each of R¹² and R¹³ or R¹⁸ and R¹⁹ can independently be H;

10 wherein R²⁴ and R²⁵ are either H or CH₃;

 wherein the dotted line is an optional double bond;

 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

15 35 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure



 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a

20 phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle,

an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, and R¹⁶ and R¹⁷ together independently form a

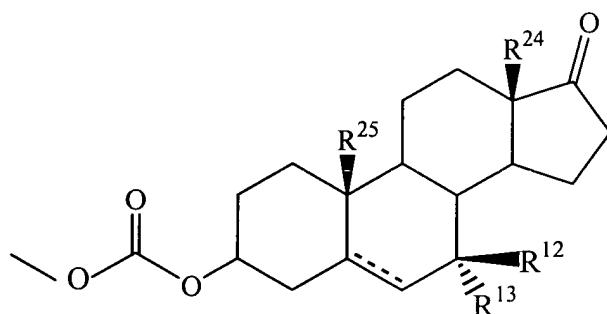
5 double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of each of R¹² and R¹³ can independently be H; wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration;

10 and a pharmaceutically acceptable excipient.

36 (withdrawn): The pharmaceutical composition of claim 35, wherein said at least one compound has the following structure



15 wherein R¹² and R¹³ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an

20 optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R¹² and R¹³ together form a double

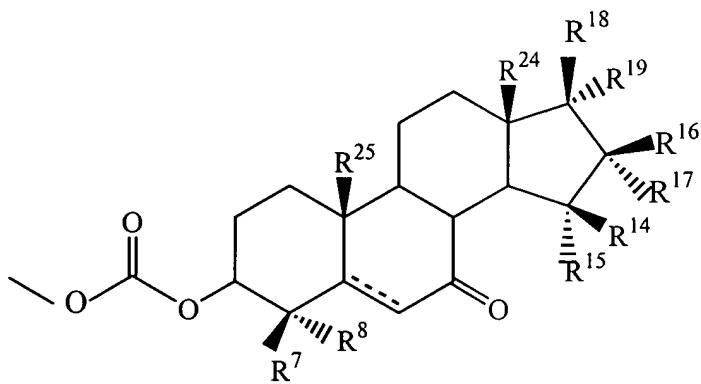
bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of R¹² and R¹³ is H;

wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

5 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

37 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure

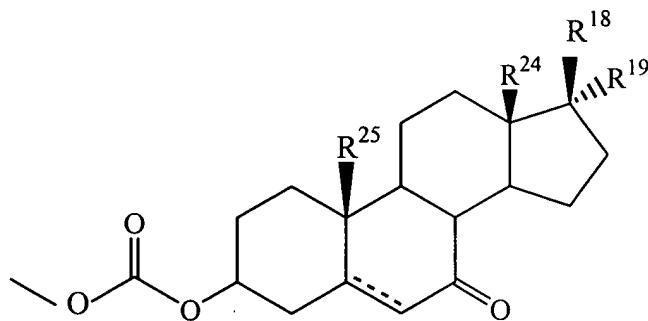


10 wherein R⁷, R⁸, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of each of R¹⁸ and R¹⁹ can be H;

wherein R²⁴ and R²⁵ are either H or CH₃;
wherein the dotted line is an optional double bond;
wherein the -OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

5

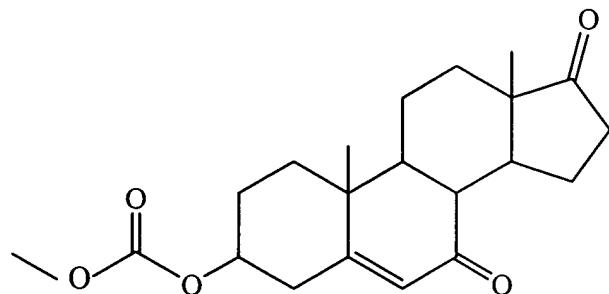
38 (withdrawn): The pharmaceutical composition of claim 37, wherein said at least one compound has the following structure



wherein R¹⁸ and R¹⁹ are each independently selected from the group
10 consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an
15 optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R¹⁸ and R¹⁹ together form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH,
20 provided that only one of R¹⁸ and R¹⁹ is -H;
wherein R²⁴ and R²⁵ are either H or CH₃;
wherein the dotted line is an optional double bond;
wherein the -OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

25

39 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure

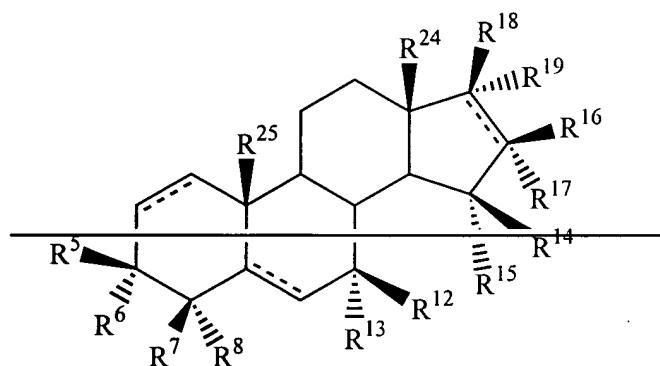


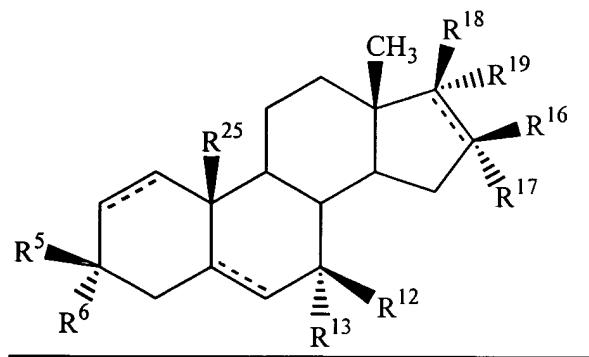
and a pharmaceutically acceptable excipient.

5

Claims 40-55 (cancelled).

Claim 56. (currently amended): A method to treat an androgen responsive disease prostate cancer or androgen responsive benign prostatic hyperplasia in 10 a subject, or to ameliorate one or more symptoms thereof, comprising administering to the subject, or delivering to the subject's tissues an effective amount of a formulation comprising one or more excipients and a compound having the structure





wherein,

~~R⁵ and R⁶ independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, an ester, NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a~~

5 ~~carbonate, a carbamate, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a monosaccharide, an oligosaccharide or a polymer, a monosaccharide or an oligosaccharide, provided that at least one of R⁵ and R⁶ is a carbonate R⁵ or R⁶ is a carbonate;~~

10 ~~R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ together R¹², R¹³, R¹⁶ and R¹⁷ together or each independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, -OSO₃H, -OPO₃H, =O, =S, =CH₂, =NOH, an ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group or an optionally substituted alkynyl group; and~~

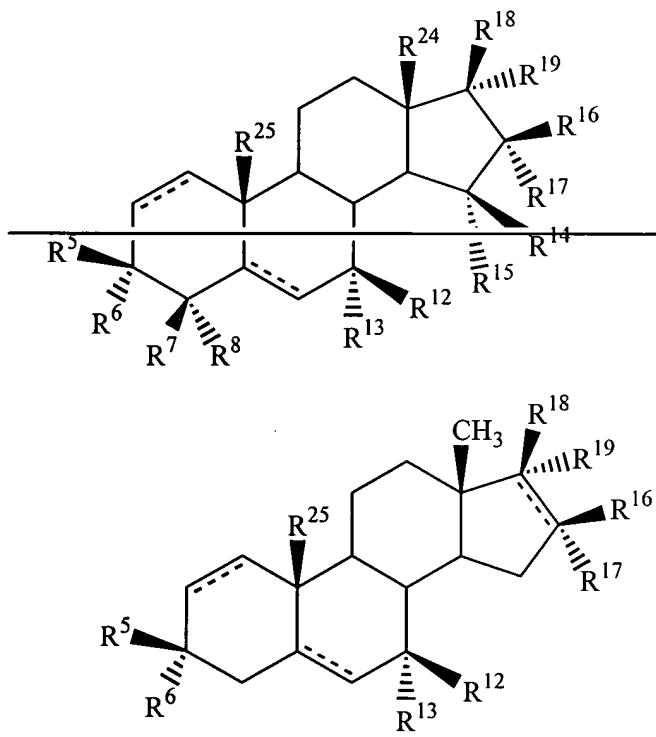
15 ~~R¹⁸ and R¹⁹ together or each independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =CH₂, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer, provided R¹⁸ or R¹⁹ is -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer, a monosaccharide or an oligosaccharide, and~~

20 ~~R¹⁸ and R¹⁹ together or each independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =CH₂, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer, provided R¹⁸ or R¹⁹ is -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer, a monosaccharide or an oligosaccharide, and~~

~~R²⁴ and R²⁵ independently are H, ester, ether or R²⁵ is -H or optionally substituted alkyl.~~

5 Claim 57. (currently amended): The method of claim 56, wherein the
androgen responsive disease is ~~selected from the group consisting of breast
cancer, alopecia, acne, hypogonadism and hirsutism androgen responsive
prostate cancer.~~

10 Claim 58. (currently amended): The method of claim 57 wherein the
compound has the structure



15 Claim 59. (currently amended): The method of claim 58 wherein
(a) R¹⁸ is -OH, -O-C(O)-CH₃, -O-C(O)-CH₂CH₃, -OH, -O-C(O)-CH₃ or -O-C(O)-CH₂CH₃ and R¹⁹ is -H, -C≡CH or -C≡CCH₃, or R¹⁸ and R¹⁹ together are =O, =S or =NOH, or

(b) R^{18} is -H, -C≡CH or -C≡CCH₃ and R^{19} is -OH, -O-C(O)-CH₃, -O-C(O)-CH₂CH₃.

Claim 60 (canceled).

5

Claim 61. (currently amended): The method of ~~claim 60~~ wherein claim 59
wherein R^{12} and R^{13} independently or together are -H, -OH, -SH, -NH₂, =CH₂,
=CHCH₃, =NOH, =NOC(O)CH₃, =O or =S.

10 Claim 62 (canceled).

Claim 63. (currently amended): The method of ~~claim 62~~ wherein claim 59
wherein R^{16} and R^{17} independently or together are -H, -OH, -SH, =O, =S, -O-
C(O)-CH₃ or -O-C(O)-OCH₃.

15

Claim 64 (currently amended): The method of ~~claim 63~~ wherein R^5 and R^6
~~independently or together are -H, -OH, -SH, =O, =S, -O-C(O)-CH₃ or -O-C(O)-~~
~~OCH₃~~ claim 59 wherein R^5 or R^6 is -H, -CCH₃, -CH₃ or -C₂H₅.

20 Claim 65 (currently amended): The method of claim 64 wherein R^{24} is -
CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃ and R^{25} is -H, -
CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃.

Claim 66 (canceled).

25

Claim 67. (currently amended): The method of ~~claim 66~~ wherein R^{24} and
 R^{25} are -CH₃ claim 65 wherein R^{25} is -CH₃.

30 Claim 68. (currently amended): The method of claim 67 wherein a double
bond is present at the 1-2 and 5-6 positions and R^{24} and R^{25} are both -CH₃.

Claim 69. (currently amended): The method of claim 67 wherein a double bond is present at the 5-6 position and R^{24} and R^{25} are both CH_3 .

5